To: Stephanie Vaughn/R2/USEPA/US@EPA[]
From: "Robert Law"
Sent: Thur 12/20/2012 5:29:33 PM
Subject: Fwd: RE: LPR RM 10.9 Removal Action * Proposed Dredging Operations - Potential to Emit Calculations
Responses to NJDEP BAP Questions of 20121212.pdf
Typical Dredge Excavator.pdf
PC1250_1250SP-8_.pdf
LPR RM10 9 Dredging Air EmissionsPTE to NJDEP - rev 121812.xlsx
negib.harfouche@dep.state.nj.us

FYI

>>> Stan Kaczmarek 12/20/2012 11:32 AM >>>
Negib,

Attached is our reply to the questions you posed last week, descriptions of equipment that could be used to dredge the RM 10.9 area, and a revised Potential To Emit spreadsheet. We hope that these pieces of information will provide a clearer picture of potential air emissions from the proposed dredging operations.

As always, please call or email me if you have any additional questions.

Stan Kaczmarek, PE
Senior Project Director
de maximis, inc.
186 Center Street, Suite 290
Clinton, NJ 08809

(973) 978-9621

>>> On 12/12/2012 at 4:11 PM, in message
<5EAB3056C9EB434AA6D81538700F93CD02268C6C1F96@TRETMSTEVS5.tmis.treas.state.nj.us>,
"HarFouche, Negib" <Negib.HarFouche@dep.state.nj.us> wrote:
Stan,

Please provide information about the following:

1. Will there be any engine(s) or power generating equipment to be used as part of the dredging operations?. If so, please provide category i.e., stationary or mobile/portable, size (HP), model year and fuel type?

2. What's the maximum length of time {hours}, amount {tons} and likely surface area {ft2} of dredge sediment that would be exposed on "X" (number of) barge(s) at any one time per day? Per week? The PTE calculations assumed 1-day or 24-hrs of sediment exposure time.

3. What's the maximum dredge sediment concentration of H2S?

4. What's the maximum duration {hours} of dredging operations projected for removing 37,908 tons of dredge sediment?

5. Were there any other organic &/or heavy metal contaminants identified in the dredge sediments at or above detection limits, e.g. DDT, DDE, DDD, PAH, etc.?

Should you have any questions I can be reached at (609) 292-2137.

Thank you

Negib

Negib Harfouche, Ph.D.

Environmental Engineer 3

NJDEP, Bureau of Air Permits (BAP)

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negib.harfouche@dep.state.nj.us

From: Stan Kaczmarek [mailto:StanK@demaximis.com]
Sent: Tuesday, December 11, 2012 1:17 PM
To: Nickerson, Jay; HarFouche, Negib; Kettig, Robert
Cc: Roger.McCready@CH2M.com; Willard Potter; Robert Law
Subject: LPR RM 10.9 Removal Action - Proposed Dredging Operations - Potential to Emit Calculations

Per the request of NJDEP, the CPG is providing an evaluation of the "Potential to Emit" (PtE) during proposed dredging operations for the RM 10.9 removal action.

Attached you will find the following items related to calculation of potential air emissions associated with the LPR RM10.9 dredging operations.

An Excel spreadsheet calculating potential emissions from dredging operations for the LPR RM10.9 removal action. Potential emissions were assumed to be coming only from the dredged sediment itself with no other portable/temporary combustion equipment being identified for this operation. VOC emissions were calculated based on Section 4.2 (Dredging) of EPA's Air/Superfund National Technical Guidance document "Models for Estimating Air Emission Rates from Superfund Remedial Actions" dated March 8, 1993. Emissions of Dioxins (2,3,7,8-TCDD), PCBs and mercury were estimated using NJDEP's published volatilization rates for processing/stabilizing dredge sediment.

An example calculation for potential 1,2-Dichlorobenzene emissions from LPR RM10.9 dredging operations utilizing the EPA guidance methodology.

A copy of the EPA's Air/Superfund National Technical Guidance document "Models for Estimating Air Emission Rates from Superfund Remedial Actions". Section 4.2 contains the emissions calculation methodology for VOC emissions from dredging operations.

It was discussed at the November 29th meeting that if the CPG provided this information to the Air Quality Permitting Program via Rob Kettig and Negib HarFouche, they would share and discuss it with the enforcement side of the program to determine whether an air permit would be required for the dredging operations portion of the project. We also discussed the possibility that a permit may not be required due to the lack of potential VOCs. Our analysis appears to support that possibility because the PtE for the COPCs present in the RM 10.9 sediments is often orders of magnitude below the NJDEP Reporting Threshold; even the PtEs for TCDD and PCBs remain 3.5 to 4.5 times below the NJDEP Reporting Threshold.

Please reach out to me at 973-978-9621 or by replying to this email if you have any questions or would like to arrange for a teleconference / meeting with our regulatory specialists to examine this data and analysis in more detail.

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